

Are All Trust Violations the Same? A Dynamical Examination of Culture, Trust Dissolution, and Trust Recovery

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Abstract. As our global interdependence grows, understanding how culture affects trust and how we can manage trust in intercultural relations is imperative. However, relatively few studies have focused on the relationship between trust and culture, and little of this work examined multiple trust phases sequentially to reveal the dynamics of trust over time. This research examined how the cultural differences of self-construal (individualistic vs. collectivistic) moderates the relationship between trust violation magnitude and trust change in two post-violation phases: trust dissolution and trust recovery. We adopted an economic game methodology, the Investment Game, which allows repeated measures to examine trust dynamics. The results revealed a joint effect of self-construal and trust violation magnitude on the dynamic of trust changes. Implications for intercultural negotiation will be discussed.

Keywords: Trust (Social Behavior), Cross-Cultural Differences, Dynamical Process.

1 Introduction

Trust has long been a focal interest in social sciences and linked to a myriad of social-psychological phenomena. It has been shown to facilitate interpersonal relationships [1], cooperation [2], teamwork [3], and leadership [4]. Furthermore, scholars view trust as a driving force in conflict de-escalation [5], a foundation for democracy [6], and a key driver of national economic well-being [7].

Moreover, as our global interdependence grows, interpersonal and institutional relations frequently cross national and cultural boundaries. However, there are surprisingly few empirical studies on trust in relation to cultures ([8]; for notable exceptions, see [9], [10]). In fact, it is estimated that over 90% of psychological research is conducted on less than 30% of the world population [11]. Understanding how culture affects trust is critical. It is unlikely that the trust process is universal, especially when many fundamental psychological phenomena have been shown to exhibit cultural specificity [12]. The first goal of this research project, therefore, was to examine how culture, in combination with situational factors, affects the trust process dynamically.

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In addition to a lack of understanding on culture and trust, the trust literature is also limited by its predominant focus on trust building [8]. There has been a growing concern about the prevalence of trust violations [13], [14] but little is known about their impact on relationships. The second goal of our study was to focus on the two trust phases after violations, namely trust dissolution and trust recovery. *Trust dissolution* refers to a period when, after trust violations, trustors decide to lower their trust in trustees, and *trust recovery* occurs when trust stops declining after violations and starts to rebound [15].

Despite the recognition of multiple trust phases in the literature, existing research tends to be phase-specific, examining one trust phase at a time [15]. We argue that such a narrow focus provides only a snapshot of the trust process as it naturally occurs. Interactions between individuals are continuous, and the isolation of a single trust phase cannot provide a holistic picture of how trust patterns unfold over time. For example, after a violation, trust may plummet initially but rebound with repeated interactions [15]. Thus, the third goal of our study was to examine trust dissolution and trust recovery sequentially.

In sum, to begin to fill the theoretical and empirical void in trust literature, our research 1) examines the impact of culture on trust in conjunction with a situational variable, 2) focuses on the trust after violations, and 3) measures trust continuously in trust dissolution and recovery to reveal its dynamics after trust violations. Further, we believe that the fluctuation in trust across phases is influenced by situational factors, cultural differences, and interactions between these factors. For example, the magnitude of trust violations is expected to affect trust dynamics, with large violations leading to faster trust dissolution and slower trust recovery than small trust violations. However, these trust patterns are also expected to differ across cultures and, as we discuss below, cultural factors are expected to interact with the magnitude of violations. To achieve these three goals of our research project, we adopted the paradigm of the Investment Game (IG) [16]. The IG collected repeated measures that allow longitudinal modeling to reveal the nonlinear and dynamic nature of trust.

1.1 Trust Violations

The inclusion of trust violation in examination of trust dynamics is imperative, as the act of trusting implicitly accepts future uncertainty and risk [9], [15], [10]. In fact, the very conditions that foster trust, and the existence of trust itself, allow for malfeasance [17].

Trust violations vary in their degree; a delay in returning a book is clearly different from failure to keep a marriage vow. Small transgressions, therefore, should not have the same impact on trust changes as large breaches of trust. For example, Tomlinson, Dineen, and Lewicki [18] found the magnitude of a violation moderated the relationship between the estimated likelihood of future violations and trust recovery. While it is reasonable to expect that large trust violations will lead to faster trust decline and slower trust recovery than small violations, a key question is how cultural influence affects this trust pattern. Thus, our research project examined the moderating effect of culture on the relationship between violation magnitude and trust dynamics.

1.2 The Relationship between Trust Violation and Self-Construal

In this research project, we examined the interplay between trust and culture through the construct of self-construal. Individuals have divergent views about the self and others [19]. Markus and Kitayama [12] proposed that people with individualistic self-construal endorse “a conception of the self as an autonomous, independent person” (p. 226). This conceptualization of the self is dominant in the West. In contrast, people in Asian and Middle Eastern cultures tend to have collectivistic self-construal and view “the self. . . not as separate from the social context but as more connected and less differentiated from others” (p. 227).

Therefore, trustors with collectivistic self-construal should, generally speaking, identify with their trustees more than do trustors with individualistic self-construal. Social identity theory asserts that when individuals identify with another, they are motivated to maintain positive perceptions of the person to maintain high self-esteem [20]. This motivation, combined with the higher level of trustworthiness individuals perceive from people with whom they identify [21], should prompt collectivistic trustors to be more tolerant toward minor trust violations and restore trust more easily than individualistic trustors.

*Hypothesis 1: After **small** trust violations, collectivists will experience **slower** trust decline and **faster** trust recovery than individualists.*

With large trust violations, however, we propose that the pattern would be reversed. Because of their deeper identification with their social context, it may be more difficult for collectivists to overcome large trust violations than individualists. Evidence of the “black sheep effect” [22] has demonstrated that, when identified others exhibit major shortcomings, people can have low tolerance of the failings and engage in denigration of these individuals. This black sheep effect is the strongest when individuals *closely identify with others* [23], such as a trustor with collectivist self-construal. The combination of large violations and collectivistic self-construal, therefore, should lead trust breaches to be even more personally relevant to collectivistic trustors. Consequently, collectivistic trustors would attempt to distance self from the betrayer more by considerably decreasing their trust to another and take longer to recover from the damage of large violations than individualistic trustors.

*Hypothesis 2: After **large** trust violations, collectivists will experience **faster** trust decline and **slower** trust recovery than individualists.*

2 Methods

2.1 Design and Participants

The study employed a 3 x 2 design, examining the processes in which trust violations (large vs. small vs. control) and self-construal (collectivistic vs. individualistic) affect

trust dissolution and trust recovery among student samples [24]. A total of 69 students in a large, public university participated in the study. Of these, 29% were male and 71% were female. Additionally, 15% were White, 10% were Asian American, 55% were African American, and 20% were Hispanic. The mean age was 19.67 (SD=1.35).

2.2. Apparatus and Procedure

We conducted laboratory experiments using a variant of the Trust Game, the Investment Game (IG) [16], to measure trust. The IG is ideal for our study for a number of reasons. First, the design of IG affords social exchanges that mirror real-world interactions. Second, the structure of IG allows examination of how trust violations affect trust changes. Finally, an iterated IG [25] is suitable in examining nonlinear attitudinal changes because it permits repeated measures of trust.

In each experimental session, participants played 19 rounds of IG on computers in individual rooms. The number of rounds, determined in the pilot studies, balances the time per round and the total number of rounds necessary to observe the nonlinear and dynamic trust changes. Upon starting the experiment, participants were informed that they will engage in multiple rounds of brief interaction with another participant. In actuality, participants played the IG with the computer-programmed partner. Appendix A described the game structure and specific steps involved in details. Participants filled out a self-construal scale after completing the IG.

2.2. Measures

Two measures of trust, behavioral and attitudinal, were collected at each round during the game. The behavioral measure of trust was represented by the number of coins participants allocated to the partner and the attitudinal measure was assessed through a single item “how much do you trust the other player?” on a 7-point scale (1 = *not at all*, 7 = *completely*). Self-construal was measured using the scale of independent and interdependent self-construal [26]. On a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*), 24 items measured the extent to which participants have independent versus interdependent self-construal. A sample item was “I enjoy being unique and different from others in many respects.” The alpha for this scale was .71.

3 Results

All data analyses were conducted using the R software environment for statistical computing [27] and the nlme package [28]. Specifically, we applied growth modeling [29] to analyze the data, a common method in longitudinal data analysis. Furthermore, we conducted a mixed effect model, setting rounds, violations magnitude, and collectivistic self-construal as fixed effects while allowing for within-individual random variation in slopes associated with rounds of the IG. The model included 2 levels. The higher level consisted of individuals’ collectivistic self-construal and their

attitudinal and behavioral measures of trust, while the lower level consisted of rounds. Our random coefficient model (RCM) following the recommended procedures [30].

Our results showed that a significant three-way interaction effect of time (as rounds), violation magnitude, and levels of collectivistic self-construal affected the amount of coins participants allotted to their programmed partner ($b=-0.68$, $t(1238)=-1.97$, $p<.05$). Supporting Hypothesis 1, collectivistic trustors displayed slower trust dissolution and faster trust recovery after small trust violations than individualistic trustors.

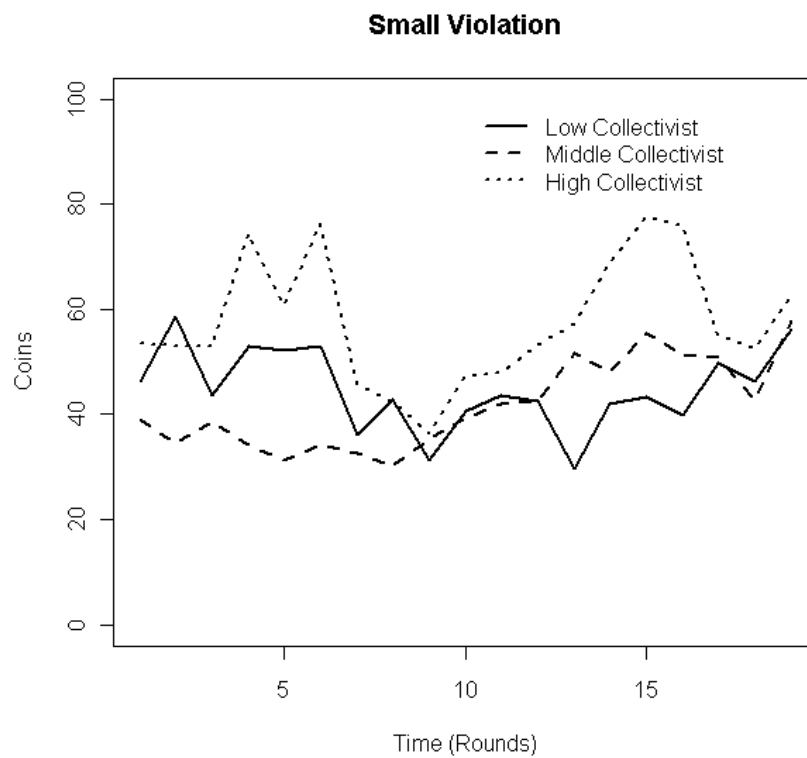


Fig. 1. Trust patterns of individuals with high, medium, and low levels of collectivistic self-construal after small trust violations.

In contrast, collectivistic trustors displayed faster trust dissolution and slower trust recovery after large trust violations than individualistic trustors. This pattern supported Hypothesis 2.

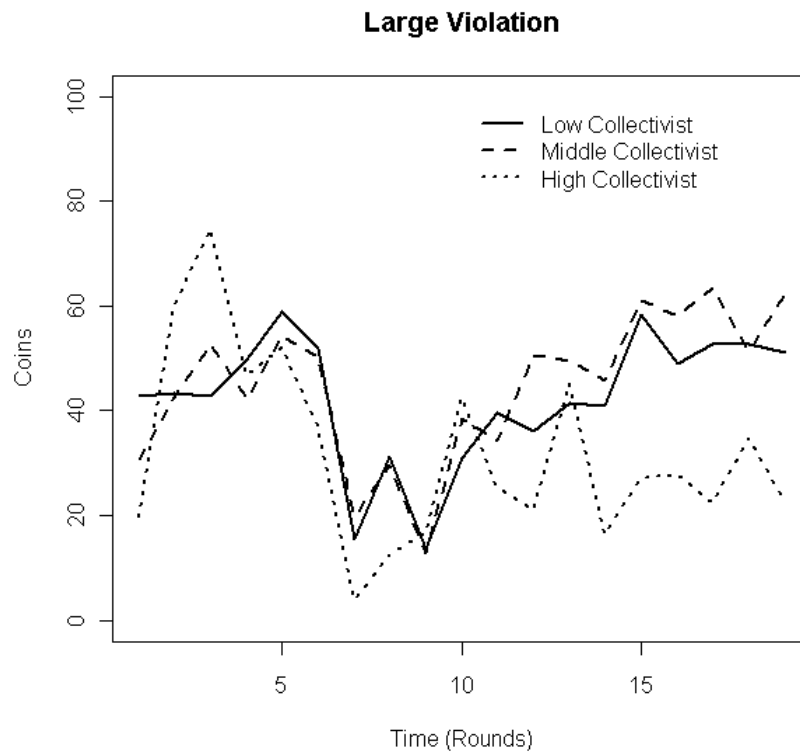


Fig. 2. Trust patterns of individuals with high, medium, and low levels of collectivistic self-construal after large trust violations.

4 Discussion

Prior research has conceptualized the trust process as consisting of three distinct phases [15]. In the present study, we focused on trust dissolution and trust recovery. In addition, we investigated whether the cultural differences of collectivistic and individualistic self-construal interacted with the situational factor of trust violation magnitude on these two phases. Results from the discontinuous growth modeling revealed a significant three-way effect among rounds, self-construal, and magnitude of trust violation. Further, supporting our hypotheses, we found that collectivistic trustors display divergent patterns of trust dissolution and trust recovery depending on the magnitude of trust violations. After small trust violations, collectivists showed

slower trust decline and faster trust recovery than individualists. In contrast, after large trust violations, collectivists showed faster trust decline and slower trust recovery than individualists. In other words, compared to individualistic trustors, collectivistic trustors tend to allow more latitude for small trust violations but were less flexible with large trust violations. The results with large violation indicated an existence of the black sheep effect among collectivistic trustors, exhibiting low tolerance toward large trust violations and engaging in more negative behaviors toward the ingroup members who committed the large trust violations.

The contributions of our study are three-fold. First, in response to concerns about little research on trust violations [8], the present research focused on the trust process after violations. Second, our study was among the first to examine multiple trust phases sequentially. The findings support the notion that trust is dynamic, as suggested by other scholars in the field [15]. Finally, our study included both the cultural variable of self-construal and the situational variable of trust violation magnitude as antecedents of trust changes. The results on joint effects of the cultural and situational variables suggest that researchers need to take both factors into account to fully explore the complexity of trusting relationships. Future research should examine additional situational factors such as time pressure, accountability, and the nature of the group (e.g., friend versus stranger) along with cultural factors to predict the dynamical nature of trust.

Both trust and culture are increasingly important in determining our societal well-being. We believe that a dynamical approach to trust processes, combined with rigorous and appropriate methodology, will provide scientists better understanding of this important construct and make an impact on our field and our global community.

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References

1. Rempel, J.K., Holmes, J.G., Zanna, M.P.: Trust in Close Relationships. *Journal of Personality and Social Psychology*, 49, 95--112 (1985)
2. Buchan, N.R., Croson, R.T.A., Dawes, R.M.: Swift Neighbors and Persistent Strangers: a Cross-Cultural Investigation of Trust and Reciprocity in Social Exchange. *American Journal of Sociology*, 108(1), 168--206 (2002)
3. Lawler, E.J.: Affective Attachments to Nested Groups: a Choice-Process Theory. *American Sociological Review*, 57(3), 327--339 (1992)
4. Dirks, K.T., Ferrin, D.L.: Trust in Leadership: Meta-Analytic Findings and Implications for Research and Practice. *Journal of Applied Psychology*, 87, 611--628 (2002)
5. Axelrod, R.: *The Evolution of Cooperation*. Basic Books, New York (1984)

6. Putnam, R.D.: Making Democracy Work: Civil Traditions in Modern Italy. Princeton University Press, New Jersey (1993)
7. Fukuyama, F.: Trust: The Social Virtues and the Creation of Prosperity. Free Press, New York (1995)
8. Schoorman, F.D., Mayer, R.C., Davis, J.H.: An Integrative Model of Organizational Trust: Past, Present, and Future. *Academy of Management Review*, 32(2), 344--354 (2007)
9. Bohnet, I., Herrman, B., Zeckhauser, R.: The Requirements for Trust in Gulf and Western Countries. *Quarterly Journal of Economics* (*in press*)
10. Yamagishi, T., Cook, K.S., Watabe, M.: Uncertainty, Trust, and Commitment Formation in the United States and Japan. *American Journal of Sociology*, 104, 165--194 (1998)
11. Triandis, H.C.: Cross-Cultural Industrial and Organizational Psychology. In: *Handbook of Industrial and Organizational Psychology*, pp. 103--172. Consulting Psychologists Press, California (1994)
12. Markus, H.R., Kitayama, S.: Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review*, 98, 224--253 (1991)
13. Elangovan, A.R., Shapiro, D.L.: Betrayal of Trust in Organizations. *Academy of Management Review*, 23(3), 547--566 (1998)
14. Morris, J.H., Moberg, D.J.: Work Organizations as Contexts for Trust and Betrayal. In: *Citizen Espionage: Studies in Trust and Betrayal*, pp. 163--187. Praeger Publishers/Greenwood Publishing Group, Connecticut (1994)
15. Rousseau, D., Sitkin, S., Burt, R., Camerer, C.: Not So Different After All: a Cross-Discipline View of Trust. *Academy of Management Review*, 23, 393--404 (1998)
16. Berg, J., Dickhaut, J., McCabe, K.: Trust, Reciprocity, and Social History. *Games and Economic Behavior*, 10, 122--142 (1995)
17. Granovetter, M.: Economic action and social structure: The Problem of Embeddedness. *American Journal of Sociology*, 91, 481--510 (1985)
18. Tomlinson, E.C., Dineen, B.R., Lewicki, R. J.: The Road to Reconciliation: Antecedents of Victim Willingness to Reconcile Following a Broken Promise. *Journal of Management*, 30(2), 165--187 (2004)
19. Triandis, H.C.: The Self and Social Behavior in Differing Cultural Contexts. *Psychological Review*, 96, 506--520 (1989)
20. Tajfel, H., Turner, J.C.: An Integrative Theory of Intergroup Conflict. In: Austin, W. G., Worchel, S. (Eds), *The Social Psychology of Intergroup Relations*. Brooks/Cole, California (1979)
21. Brewer, M.B., Kramer, R.M.: The psychology of Intergroup Attitudes and Behavior. *Annual Review of Psychology*, 36, 219-243 (1985)
22. Marques, J.M., Yzerbyt, V.Y., Leyens, J.-P. : The Black Sheep Effect: Judgmental Extremity toward In-Group Members as a Function of Group Identification. *European Journal of Social Psychology*, 18, 1--16 (1988)
23. Branscombe, N., Wann, D., Noel, J., Coleman, J.: In-Group or Out-Group Extremity: Importance of the Threatened Social Identity. *Personality and Social Psychology Bulletin*, 19(4), 381--388 (1993)
24. James, W.L., Sonner, B.S.: Just Say No to Traditional Student Samples. *Journal of Advertising Research*, 41(5), 63--71 (2001)

25. Cochard, F., Nguyen Van, P., Willinger, M.: Trusting Behavior in a Repeated Investment Game. *Journal of Economic Behavior & Organization*, 55(1), 31--44 (2004)
26. Singelis, T.M.: The Measurement of Independent and Interdependent Self-Concepts. *Personality and Social Psychology Bulletin*, 20, 580--591 (1994)
27. R Core Team: R: A Language and Environment for Statistical Computing (Version 2.8.1) [Computer software]. Vienna: R Foundation for Statistical Computing (2004)
28. Pinheiro, J.C., Bates, D.M., DebRoy, S., Sarkar, D., R Core Team.: nlme: Linear and Nonlinear Mixed Effects Models (Version 3.1--89) [Computer software]. Vienna: R Foundation for Statistical Computing (2008)
29. Singer, J.D., Willett, J.B.: *Applied Longitudinal Data Analysis: Modeling Change and Event Occurrence*. Oxford University Press, New York (2003)
30. Bliese, P.D., Ployhart, R.E.: Growth Modeling Using Random Coefficient Models: Model Building, Testing, and Illustrations. *Organizational Research Methods*, 5, 362--387 (2002)
31. Lount, R.B., Zhong, C., Sivanathan, N., Murnighan, J.K.: Getting Off on the Wrong Foot: Restoring Trust and the Timing of Breach. *Personality and Social Psychology Bulletin*, 34(12), 1601--1612 (2008)
32. Sitkin, S.B., Roth, N.L.: Explaining the Limited Effectiveness of Legalistic 'Remedies' for Trust/Distrust. *Organization Science*, 4(3), 367--392 (1993)
33. Murnighan, J.K.: Defectors, Vulnerability, and Relative Power: Some Causes and Effects of Leaving a Stable Coalition. *Human Relations*, 34, 589--609 (1981)

Appendix: Structure of the Investment Game (IG)

The IG involves two players, Player A and Player B. In this study, all participants were assigned to the role of Player A (trustor) and the computer-programmed partner was Player B (trustee). In the beginning of each round, Player A was given 100 coins and decided a proportion of the endowed coins to entrust to Player B (0-100). This decision revealed how much Player A trusts Player B. After allocating coins to Player B, Player A also indicated their level of trust in Player B. Thus, in addition to a behavioral measure of trust as represented by the entrusted coins, the study included an attitudinal measure of trust with the question "how much do you trust the other player?" (7 = *completely*; 1 = *not at all*).

The amount sent to Player B by Player A was then tripled, and Player B decided a portion of the tripled coins to return to Player A. The game constituted of 19 such round. In violation conditions, trust breaches occurred in the 6th, 7th, and 8th rounds trust violations. Violations occurred during these rounds because they were relatively early in the game, and yet were not right in the beginning, which may lead to irreversible damage to trust [31]. The three rounds of violations were designed so that participants would not perceive the violations as an isolated incident, which the participant could discount and keep trust unaffected [32]. During the three violation rounds, Player B kept either all or the majority of the coins, depending on the violation conditions. In non-violation rounds, Player B returned approximately half of

the tripled coins with small random variations. At the end of the 19th round, the game stopped. As knowledge of the end of a transaction tends to decrease cooperation [33], participants did not know how many rounds remained during the game before the end.

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